



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,678	11/28/2003	Hirotooshi Ishida	245084USORE	9589
22850 7590 06/01/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TRAN LIEN, THUY	
			ART UNIT	PAPER NUMBER
			1761	
			NOTIFICATION DATE	DELIVERY MODE
			06/01/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/722,678 , 90/007164

Applicant(s)

ISHIDA ET AL.

Examiner

Lien T. Tran

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,10-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The rejection of claim 11 under USC 251 is hereby withdrawn.

The 112 rejection and the objection to the amendment and declaration are hereby withdrawn.

Claims 1, 3-6, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al (US 2002/0037350A1) in view of Wakamatsu et al. (4835301)

Ishii et al disclose a sweetener composition comprising DMB-APM which is known as neotame and aspartame (APM). The amount of DMB-APM is between .1-35% by weight of the total amount of DMB-APM. The ratios of DMB-APM are in the range of 1:9 to 9:1. The sweetener composition can be in the form of a powdery mixture comprising DMB-APM together with APM. The mixture can contain diluent or bulking agents such as sugar alcohol, dietary fiber, sucrose, glucose and the like. The composition is used into various foods and drinks including carbonated and non-carbonated beverages. Test Samples 3,4 shows several carbonated cola solutions containing DMB-APM and APM composition. Example 2 shows the preparation of cola base solution in which the composition is added potable liquid. (see paragraphs 0009,0010, 0014, 0013, 0019).

Ishii et al do not disclose the DMB-APM is a C-type crystal, the X-ray diffraction peaks and the water content.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hygroscopic and has good flow and storage stability. Type II differs from type I in the moisture content and is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. (see examples 2-13 on column 3 and col. 1 lines 10-15)

Art Unit: 1761

Since Ishii et al disclose the amount of neotame is .1-35%, it is obvious the amount of aspartame is 65-99.9% which falls within the range claimed. It would have obvious to one skilled in the art to further dry the neotame to obtain crystal with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

Claims 1, 3-6, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Wakamatsu et al (4835301)

Anderson et al. teach synergistic combinations of sweeteners including d-tagatose with binary sweetener mixtures select from a group including Aspartame and Neotame. The ratio of D-tagatose to the other sweeteners is 1:5, and for a beverage formulation Neotame is preferred.

Anderson et al. are silent in teaching a particular level of powdered Aspartame, the neotame is a C-type crystal, the X-ray diffraction peaks and the water content of the neotame.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture

Art Unit: 1761

content is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. (see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have been obvious to one skilled in the art to determine the amount of aspartame that would give the optimum degree of sweetness, flavor, taste to the product in which the composition is used in. Such determination can readily be determined through routine experimentation with various amounts to determine the most optimum ones. It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d

Art Unit: 1761

1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Long, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Omum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,3-6 and 10-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 09/355980 in view of Wakamatsu et al.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are directed at sweetener composition comprising DMB-APM and Aspartame wherein the amount of aspartame in the copending case is in amount of 65-99.9%. The copending application does not disclose the DMB-APM as C-crystal.

Wakamatsu et al disclose a process for producing stable aspartame. They teach

Art Unit: 1761

that aspartame has two types of crystals I and II. Type II crystals are less hygroscopic and have good flow and storage stability. Type II differs from type I in the moisture content and is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. (see examples 2-13 on column 3 and col. 1 lines 10-15) It would have been obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. It would also have been obvious to use powdered form of the sweeteners when a granular composition is made.

In the response filed 1/12/07, applicant argues there is not rationale on how the disclosure of one sweetener can suggest to modifying another sweetener and the standard is an " obvious to try". The argument is not persuasive. The changing of the sweetener to C-crystal does not involve any reaction or alternation of the structure. The changing of the crystal type only involves drying the sweetener to a certain moisture content. Ishii et al disclose the sweetener composition is in the form of a powdery; this indicates that both of the sweeteners can be dried. Thus, if aspartame can be dried to a moisture content of less than 3%, it is obvious neotame can be dried to a moisture content of less than 3%. One would be motivated to obtain the C-crystals because they are less hygroscopic and have good flow and storage stability as shown by Wakamatsu.

Furthermore, neotame is not just any sweetener; it is a modified aspartame. Thus, if aspartame can be dried to less than 3% moisture content to make it less hydroscopic and to improve flow and storage stability, it would have been obvious to do so to neotame to obtain the same properties.

With respect to the rejection over Anderson in view of Wakamatsu, applicant makes the same argument as above. The argument is not persuasive for the same reason set forth above.

Applicant's comment with respect to the IDS statement showing if pure C-crystal of neotame were obtained under conditions of 5,480668 and 5728862 is not understood. The examiner did not find any such testing. Furthermore, testing to show unexpected result should be submitted in a 132 declaration, not on an IDS.

Applicant's arguments filed 1/12/07 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1761

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday, Wed-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cano Milton can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 3, 2007


LIEN TRAN
PRIMARY EXAMINER
Group 1700